

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A transmitting device for transmitting a digital information signal via a transmission medium,

~~including said transmitting device comprising:~~

--- input means for receiving the digital information signal  $r_i$

5 --- adaptive prediction filter means ~~adapted to derive for~~  
~~deriving~~ a prediction signal from the digital information signal in dependence on an array of prediction filter coefficients  $r_i$

--- first signal combination means for combining the digital information signal and said prediction signal so as to obtain a

10 residual signal  $r_i$

--- encoding means for encoding said residual signal so as to obtain an encoded signal  $r_i$

--- coefficient generator means for generating an array of filter coefficients  $A[i]$  in response to the digital information

15 signal,  $i$  being an integer for which it holds that  $0 \leq i < p$ , where  $p$  is a variable  $r_i$

--- output means for supplying the encoded signal to an output terminal for transmission via the transmission medium  ~~$r_i$~~  and

--- smoothing means for smoothing the array of filter

20 coefficients  $A[i]$  so as to obtain the array of prediction filter

coefficients for supply to the adaptive prediction filter means  $r_i$

wherein the smoothing means includes low-pass filtering means for low-pass filtering the array of filter coefficients so as to obtain the prediction filter coefficients, and

25 wherein said low-pass filtering means performs the following equations to obtain the coefficients:

\_\_\_\_\_  $C_{out}[0] = C_{in}[0]$  \_\_\_\_\_,

\_\_\_\_\_  $C_{out}[i] = 0.25 * C_{in}[i+1] + 0.5 * C_{in}[i] + 0.25 * C_{out}[i-1]$  \_\_\_\_\_,

whereby  $i$  is an integer and  $1 \leq i \leq n-2$ ,

30 \_\_\_\_\_  $C_{out}[n-1] = C_{in}[n-1]$  \_\_\_\_\_,

$C_{in}[x]$  being coefficient number  $x$  before smoothing, and  $C_{out}[x]$  being coefficient number  $x$  after smoothing.

2. (Cancelled).

3. (Currently Amended) The transmitting device ~~of~~ as claimed in claim 21, characterized in that the low-pass filtering means ~~comprise~~ comprises an FIR filter.

4. (Currently Amended) The transmitting device ~~of~~ as claimed claim 21, characterized in that the low-pass filtering means ~~comprise~~ comprises an IIR filter.

5. (Cancelled).

6. (Currently Amended) The transmitting device ~~of as claimed~~  
~~in any one of the preceding claims, wherein said transmitting~~  
~~device further comprises:~~

.....an arrangement for writing the encoded signal on a record  
5 carrier.

7. (Currently Amended) A method of transmitting a digital  
information signal via a transmission medium, ~~said method~~  
~~comprising the steps of:~~

--- receiving the digital information signal~~\_{i}~~

5 --- deriving a prediction signal from the digital information  
signal in dependence on an array of prediction filter

coefficients~~\_{i}~~

--- combining the digital information signal and said  
prediction signal so as to obtain a residual signal~~\_{i}~~

10 --- encoding said residual signal so as to obtain an encoded  
signal~~\_{i}~~

--- generating an array of filter coefficients  $A[i]$  in  
response to the digital information signal,  $i$  being an integer for  
which it holds that  $0 \leq i < p$ , where  $p$  is a variable~~\_{i}~~

15 --- supplying the encoded signal to an output terminal for  
transmission via the transmission medium~~\_{i}~~ and

--- smoothing the array of filter coefficients  $A[i]$  so as to  
obtain the array of prediction filter coefficients, ~~wherein:~~

20       the smoothing includes low-pass filtering the array of  
 filter coefficients  $A[i]$  so as to obtain the prediction filter  
 coefficients;  
       the low-pass filtering is selected between one or more of  
 FIR filtering and IIR filtering;  
 25       the low pass filtering applies the following equations to  
 obtain the prediction filter coefficients:  
        $Cout[0] = Cin[0];$   
        $Cout[i] = 0.25 * Cin[i+1] + 0.5 * Cin[i] + 0.25 * Cout[i-1];$   
 whereby  $i$  is an integer and  $1 \leq i \leq n-2$ ;  
        $Cout[n-1] = Cin[n-1]$ ,  $Cin[x]$  being coefficient number  $x$   
 30 before smoothing, and  $Cout[z]$  being coefficient number  $z$  after  
 smoothing;  
       supplying the encoded signal includes writing the encoded  
 signal on a record carrier.

8. (Cancelled).

9. (Cancelled).

10-12. (Cancelled).

13. (Currently Amended)     A method of transmitting information  
 via a transmission medium, said method comprising the steps of:  
       receiving a digital information signal;

generating a plurality of filter coefficients in response  
5 | to the digital information signal $r_i$   
| smoothing the filter coefficients to obtain a plurality of  
| prediction filter coefficients;  
| deriving a prediction signal from the digital information  
| signal in dependence on the filter coefficients $r_i$   
10 | combining the digital information signal and the  
| prediction signal to obtain a residual signal $r_i$   
| encoding said residual signal to obtain an encoded  
| signal $r_i$  and  
| supplying the encoded signal to the transmission medium,  
15 | wherein said smoothing step comprises low-pass filtering of the  
| filter coefficients to obtain the prediction filter coefficients,  
| and wherein the low pass filtering step performs the following  
| equations to obtain the coefficients:  
| Cout[0] = Cin[0];  
20 | Cout[i] = 0.25\*Cin[i+1] + 0.5\*Cin[i] + 0.25\*Cout[i-1];  
| whereby i is an integer and 1 ≤ i ≤ n-2;  
| Cout[n-1] = Cin[n-1], Cin[x] being coefficient number x  
| before smoothing, and Cout[z] being coefficient number z after  
| smoothing.

14. (Cancelled).

15. (Currently Amended) The method as claimed in claim 1413, wherein the low-pass filtering step comprises an FIR filter filtering.

16. (Currently Amended) The method as claimed in claim 1413, wherein the low-pass filtering step comprises an IIR filter filtering.

17. (Cancelled).

18. (Currently Amended) The method ~~of~~ as claimed in claim 1413, wherein said generating step comprises generating an array of filter coefficients, and said smoothing ~~comprise step~~ comprises smoothing the filter coefficients to obtain an array of prediction  
5 filter coefficients.